

Historic, Archive Document

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1
F762Ins
Suppl.
Reserve

U. S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

HENRY S. GRAVES, FORESTER

SIGNS, SYMBOLS AND COLORS

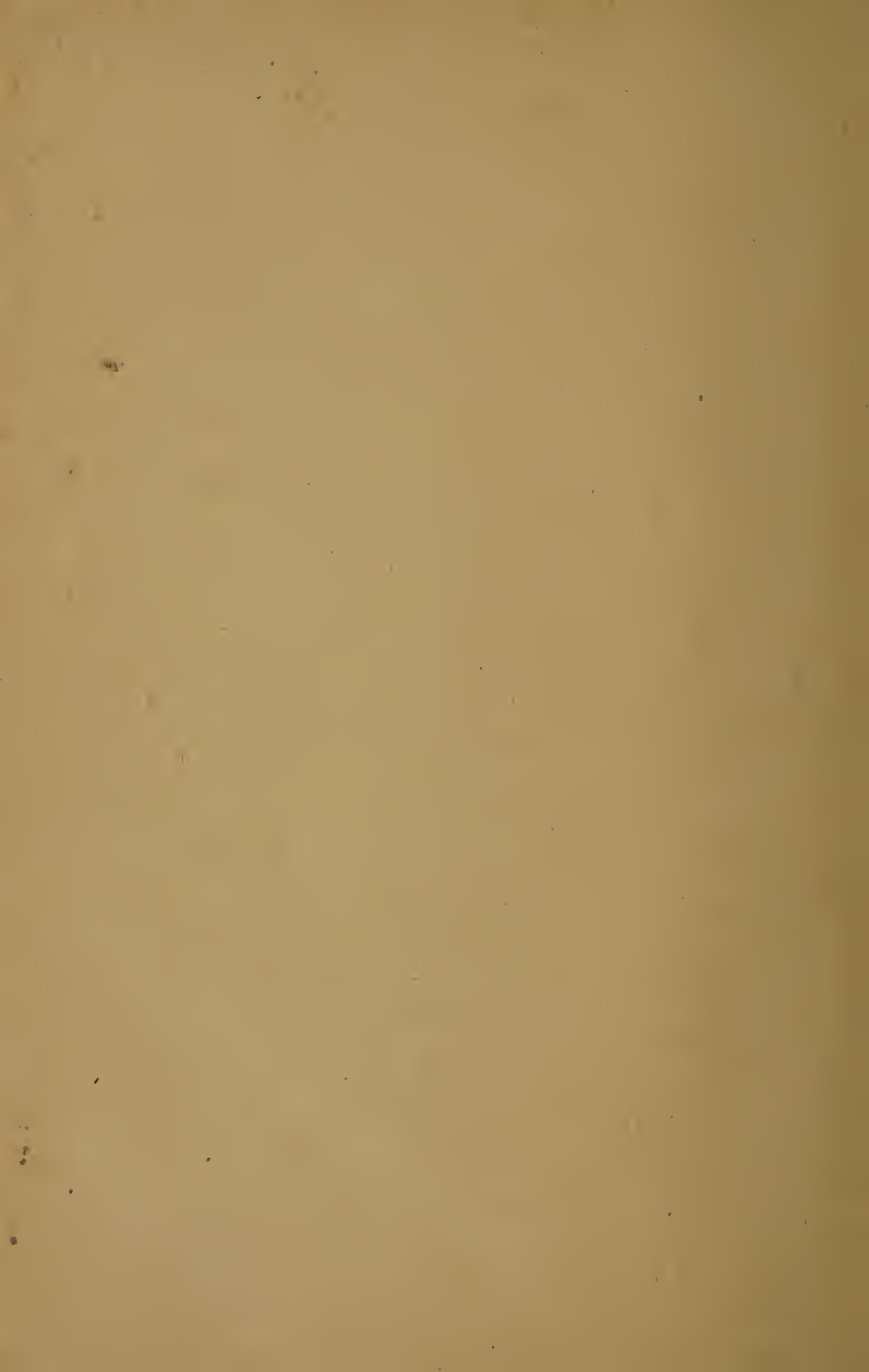
SUPPLEMENT

TO THE

INSTRUCTIONS FOR MAKING
FOREST SURVEYS
AND MAPS

PREPARED IN THE OFFICE OF GEOGRAPHY

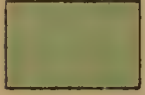
1912



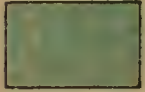
LAND CLASSIFICATION



Timberland, less than 2 MBF per acre



Timberland, 2 to 5 MBF per acre



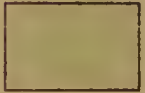
Timberland, 5 to 10 MBF per acre



Timberland, 10 to 25 MBF per acre



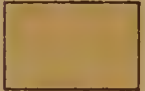
Timberland, 25 to 50 MBF per acre



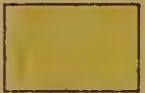
Woodland, cordwood, poles, etc.



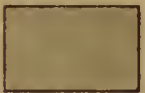
Chaparral or brushland



Sagebrush



Grassland, parks, meadows, open



Barren, above timber line, etc.



Desert



Cultivated



Irrigated



Burn, not restocking

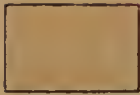







Burn, scattering trees or restocking






Burn, forest cover established (The color indicates the stand)

LOGGING LEGEND.



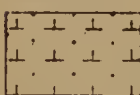
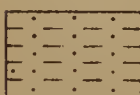

- | | |
|---|---|
|  | Old cutting, less than $\frac{1}{3}$ of the merchantable timber removed |
|  | Old cutting, $\frac{1}{3}$ to $\frac{2}{3}$ of the merchantable timber removed |
|  | Old cutting, $\frac{2}{3}$ to all of the merchantable timber removed |
|  | Timber sales, less than $\frac{1}{3}$ of the merchantable timber removed |
|  | Timber sales, $\frac{1}{3}$ to $\frac{2}{3}$ of the merchantable timber removed |
|  | Timber sales, $\frac{2}{3}$ to all of the merchantable timber removed |

PLANTING LEGEND

















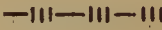
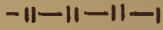

For small scale maps

- | | |
|---|----------------------------------|
|  | Experimental nursery (location) |
|  | Permanent nursery (location) |
|  | Location of Silvical experiments |



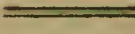
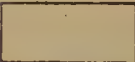
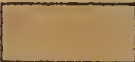
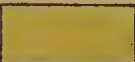
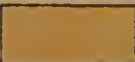


For large scale maps

- | | | |
|---|--------------------------------|---------------------|
|  | Experimental nursery (area) | |
|  | Permanent nursery (area) | |
|  | Forested by natural seeding | } For planting maps |
|  | Forested by artificial seeding | |
|  | Forested by planting | |

FIRE LEGEND

Cooperative watershed boundary (Weeks law)			
Fire district boundary			
State forester or similar officer			
District chief headquarters			
State, county, or town fire warden headquarters			
Deputy fire warden headquarters			
Patrolman camp			
	Federal	State	Private
Patrolman headquarters			
Lookout station			
Tool supply box			
Patrol route	  		

GRAZING LEGEND

	Supervisor's division
	Ranger's division
	Grazing districts
	Open for all stock
	Open for cattle and horses only
	Open for sheep and goats only
	Closed for all stock
	Lambing grounds
	Driveways for stock

ALIENATION

Initial letter symbols, showing the status of land while passing from Federal ownership.

AC	Agricultural college scrip
CE	Cash entry (including scrip location)
CC	Classified coal land
CD	Coal declaratory statement
CL	Coal entry
CF	Coal final certificate
CP	Coal patent
DE	Desert entry, original
DF	Desert entry, final certificate
DP	Desert entry patented
HE	Homestead entry, original
HF	Homestead, final certificate
HP	Homestead patented
IA	Indian allotment pending
IP	Indian allotment approved or patented
LS	Forest lieu selection pending
LA	Forest lieu selection approved
LP	Forest lieu selection patented
MC	Mineral classification
ML	Mineral location
MS	Mineral survey
MA	Mineral application
ME	Mineral entry
MP	Mineral patent
MW	Military bounty land warrant
RG	Railroad grant lands, surveyed and unsurveyed
RR	Railroad selection list pending
RP	Railroad selection approved or patented
RI	Railroad indemnity pending
RW	Reclamation Service withdrawal
RC	Reconveyance pending
RA	Reconveyance accepted
RS	Reservoir site pending
RF	Reservoir site approved
SS	State selection (including school) pending
SA	State selection certified or approved
SB	School section made basis for indemnity
SP	School section indemnity approved or patented
SH	Small holdings
TA	Timber application
TS	Timber and stone entry pending
TP	Timber and stone patent
TE	Townsite entry

ALPHA-NUMERIC SYMBOLS FOR TREE SPECIES

These symbols, properly grouped, indicate the composition, character, and stand of any forest, and therefore denote the *Forest Tree Types* to which it may be assigned. Thus :

P4 ₇ =	Pure stand, Yellow Pine.....	7 MBF per acre
D1 ₂₂ T6 ₉ H6 ₄ =	{ Douglas Fir.....	22 MBF per acre
Mixed stand		9 MBF per acre
		4 MBF per acre
P3 ₁₀ O5 ₈ Q1 ₃ =	{ Sugar Pine.....	10 MBF per acre
Mixed stand		8 tele. poles per acre
		3 cords per acre

These symbols follow, as closely as possible, a carefully devised scheme which, if understood, will make it much easier to memorize them. The scheme is as follows :

Letters and one numeral denote principal western species.

Letters and two numerals usually denote eastern species.

The first symbol, a letter, always denotes the genus.

The last symbol, a numeral, usually denotes some characteristic of the species. Thus :

0 = Black	5 = Highland
1 = Red	6 = Lowland
2 = White	7 = Dryland
3 = Blue, or gray	8 = Wetland
4 = Yellow, or sugar	9 = Others, and conflicts

When there are three symbols, the second symbol, a numeral, always denotes the geographic distribution of the species. Thus :

West of the 100° meridian—

- 0 = Pacific Coast forests
- 1 = Rocky Mountain forests
- 2 = Pacific and Rocky Mountain forests

East of the 100° meridian—

- 3 = Northern forests
- 4 = Central forests
- 5 = Southern forests
- 6 = Northern and Central forests
- 7 = Central and Southern forests
- 8 = Northern, Central, and Southern forests
- 9 = Conflicts. General distribution. Very local

CONIFERS

P0	<i>Pinus contorta</i> (<i>murrayana</i>)	Lodgepole Pine
1	<i>flexilis</i>	Limber Pine
2	<i>monticola</i>	Western White Pine
3	<i>lambertiana</i>	Sugar Pine
4	<i>ponderosa</i> (includes var. <i>scopulorum</i>)	Western Yellow Pine
5	<i>coulteri</i>	Coulter Pine
6	<i>sabiniana</i>	Gray Pine
7	<i>jeffreyi</i>	Jeffrey Pine
8	<i>radiata</i>	Monterey Pine
9	<i>attenuata</i>	Knobcone Pine
P09	<i>balfouriana</i>	Foxtail Pine
14	<i>apacheca</i>	Apache Pine
15	<i>arizonica</i>	Arizona Pine
16	<i>chihuahuana</i>	Chihuahua Pine
19	<i>cembroides</i>	Mexican Pinon
30	<i>divaricata</i>	Jack Pine
31	<i>resinosa</i>	Red Pine
32	<i>strobus</i>	White Pine
52	<i>glabra</i>	Spruce Pine
54	<i>palustris</i>	Longleaf Pine
56	<i>serotina</i>	Pond Pine
58	<i>heterophylla</i>	Cuban (Slash) Pine
59	<i>clausa</i>	Sand Pine
74	<i>echinata</i>	Shortleaf Pine
76	<i>taeda</i>	Loblolly Pine
78	<i>virginiana</i>	Scrub Pine
85	<i>rigida</i>	Pitch Pine
87	<i>pungens</i>	Table-mountain Pine
95	<i>aristata</i>	Bristle-cone Pine
B2	<i>strobiformis</i>	Mexican White Pine
5	<i>albicaulis</i>	White-bark Pine
6	<i>torreyana</i>	Torrey Pine
7	<i>edulis</i>	Pinon
9	<i>monophylla</i>	Single-leaf Pinon
A1	<i>Abies magnifica</i> (inc. <i>shastensis</i>)	Red Fir
2	<i>concolor</i>	White Fir
4	<i>nobilis</i>	Noble Fir
5	<i>lasiocarpa</i>	Alpine Fir
6	<i>grandis</i>	Grand Fir
7	<i>arizonica</i>	Arizona Cork Fir
8	<i>amabilis</i>	Amabilis Fir
9	<i>venusta</i>	Bristle-cone Fir

CONIFERS—Continued

35	<i>balsamea</i>	Balsam Fir
37	<i>fraseri</i>	Fraser Fir
S2	<i>Picea engelmanni</i>	Engelmann Spruce
3	<i>parryana</i>	Blue Spruce
5	<i>breweriana</i>	Weeping Spruce
6	<i>sitchensis</i>	Sitka Spruce
30	<i>mariana</i>	Black Spruce
32	<i>canadensis</i>	White Spruce
61	<i>rubens</i>	Red Spruce
D1	<i>Pseudotsuga taxifolia</i>	Douglas Fir
5	<i>macrocarpa</i>	Bigcone Spruce
H5	<i>Tsuga mertensiana</i>	Mountain Hemlock
6	<i>heterophylla</i>	Western Hemlock
65	<i>canadensis</i>	Hemlock
95	<i>caroliniana</i>	Carolina Hemlock
R1	<i>Sequoia semper-</i> <i>virens</i>	Redwood
5	<i>washingtoniana</i>	Bigtree
C5	<i>Chamaecyparis noot-</i> <i>katensis</i>	Yellow Cypress
6	<i>lawsoniana</i>	Lawson Cypress
52	<i>thyoides</i>	Southern White Cedar
T6	<i>Thuja plicata</i>	Western Red Cedar
62	<i>occidentalis</i>	Northern White Cedar
X58	<i>Taxodium distichum</i>	Bald Cypress
L5	<i>Larix lyallii</i>	Alpine Larch
7	<i>occidentalis</i>	Western Larch
35	<i>laricina</i>	Tamarack
05	<i>Libocedrus decurrens</i>	Incense Cedar
K5	<i>Cupressus macnab-</i> <i>iana</i>	Macnab Cypress
6	<i>macrocarpa</i>	Monterey Cypress
7	<i>arizonica</i>	Arizona Cypress
8	<i>goiveniana</i>	Gowen Cypress
9	<i>glabra</i>	Smooth Cypress
J1	<i>Juniperus utahensis</i>	Utah Juniper
2	<i>pachyphloea</i>	Alligator Juniper
4	<i>occidentalis</i>	Western Juniper
5	<i>sabinoides</i>	Mountain Juniper
7	<i>californica</i>	California Juniper
9	<i>monosperma</i>	One-seed Juniper
10	<i>flaccida</i>	Drooping Juniper
25	<i>scopulorum</i>	Rocky Mountain Red Cedar
51	<i>barbadensis</i>	Southern Red Cedar

CONIFERS—Continued

57	pinchoti	Pinchot Juniper
81	virginiana	Red Cedar
95	communis	Dwarf Juniper

BROADLEAFS

Q0	Quercus chrysolepis	Canyon Live Oak
1	californica	California Black Oak
2	lobata	Valley Oak
3	douglasii	California Blue Oak
4	garryana	Garry Oak
5	wislizeni	Wislizenus Oak
6	agrifolia	California Live Oak
07	dumosa	California Scrub Oak
7	gambelii	Gambel Oak
8	densiflora	California Tanbark Oak
9	engelmanni	Engelmann Oak
09	pricei	Price Oak
10	emoryi	Emory Oak
12	arizonica	Arizona White Oak
13	oblongifolia	Blue Oak
15	undulata	Rocky Mountain Scrub Oak
Q16	toumeyii	Toumey Oak
17	hypoleuca	Whiteleaf Oak
19	reticulata	Netleaf Oak
44	acuminata	Chinquapin Oak
47	leana	Lea Oak
48	palustris	Pin Oak
49	heterophylla	Bartram Oak
50	catesbaei	Turkey Oak
51	texana	Texan Oak
52	breviloba	Durand Oak
53	brevifolia	Blue Jack
54	virginiana	Live Oak
55	georgiana	Georgia Oak
56	chapmani	Chapman Oak
58	nigra	Water Oak
59	myrtifolia	Myrtle Oak
61	rubra	Red Oak
62	platanoides	Swamp White Oak
65	macrocarpa	Bur Oak
66	imbricaria	Shingle Oak
68	prinus	Chestnut Oak
70	pumila	Barren Oak
71	digitata	Spanish Oak
72	minor	Post Oak

BROADLEAFS—Continued

76	<i>michauxii</i>	Cow Oak
78	<i>lyrata</i>	Overcup Oak
79	<i>phellos</i>	Willow Oak
80	<i>marilandica</i>	Black Jack
81	<i>coccinea</i>	Scarlet Oak
82	<i>alba</i>	White Oak
84	<i>velutina</i>	Yellow Oak
85	<i>prinoides</i>	Dwarf Chinquapin Oak
95	<i>breweri</i>	Brewer Oak
97	<i>morehus</i>	Morehus Oak
98	<i>laurifolia</i>	Laurel Oak
E00	<i>Juglans californica</i>	California Walnut
10	<i>rupestris</i>	Mexican Walnut
62	<i>cinerea</i>	Butternut
80	<i>nigra</i>	Black Walnut
I46	<i>Hicoria lacinosa</i>	Shellbark (Hickory)
47	<i>odorata</i>	Small Pignut (Hickory)
49	<i>pecan</i>	Pecan (Hickory)
58	<i>myristicaeformis</i>	Nutmeg Hickory
78	<i>aquatica</i>	Water Hickory
80	<i>glabra</i>	Pignut (Hickory)
82	<i>alba</i>	Mocker Nut (Hickory)
85	<i>ovata</i>	Shagbark (Hickory)
88	<i>minima</i>	Bitternut (Hickory)
N89	<i>Castanea dentata</i>	Chestnut
U65	<i>Ulmus racemosa</i>	Cork Elm
75	<i>alata</i>	Wing Elm
86	<i>pubescens</i>	Slippery Elm
92	<i>americana</i>	White Elm
M2	<i>Acer macrophyllum</i>	Oregon Maple
5	<i>glabrum</i>	Dwarf Maple
81	<i>rubrum</i>	Red Maple
82	<i>saccharinum</i>	Silver Maple
84	<i>saccharum</i>	Sugar Maple
89	<i>negundo</i>	Boxelder
W0	<i>Populus trichocarpa</i>	Black Cottonwood
2	<i>fremontii</i>	Fremont Cottonwood
5	<i>tremuloides</i>	Aspen
7	<i>angustifolia</i>	Narrowleaf Cottonwood
67	<i>grandidentata</i>	Large-tooth Aspen
78	<i>heterophylla</i>	Swamp Cottonwood
94	<i>deltoides</i>	(Common) Cottonwood
96	<i>balsamifera</i>	Balm-of-Gilead
F1	<i>Fraxinus pennsylvanica</i>	Red Ash



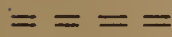







































BROADLEAFS—Continued

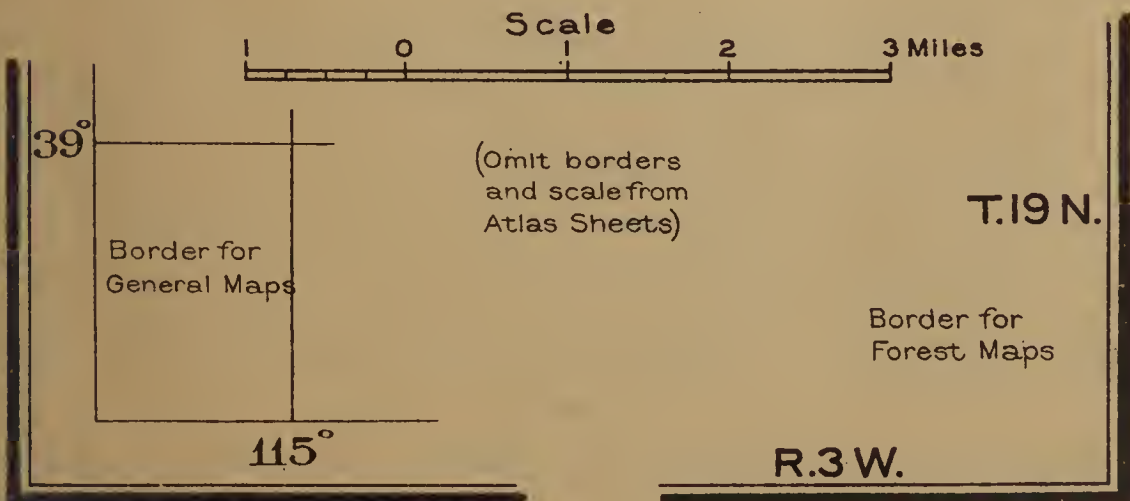
6	<i>oregona</i>	Oregon Ash
8	<i>lanceolata</i>	Green Ash
43	<i>quadrangulata</i>	Blue Ash
58	<i>caroliniana</i>	Water Ash
60	<i>nigra</i>	Black Ash
82	<i>americana</i>	White Ash
G71	<i>Liquidambar styraciflua</i>	Red Gum
W82	<i>Liriodendron tulipifera</i>	Tulip Poplar
Z82	<i>Tilia heterophylla</i>	White Basswood
88	<i>pubescens</i>	Downy Basswood
89	<i>americana</i>	Basswood
Y20	<i>Betula occidentalis</i>	Western Birch
25	<i>fontinalis</i>	Mountain Birch
32	<i>populifolia</i>	White Birch
64	<i>lutea</i>	Yellow Birch
71	<i>nigra</i>	River Birch
84	<i>lenta</i>	Sweet Birch
89	<i>papyrifera</i>	Paper Birch
V86	<i>Fagus atropunicea</i>	Beech

FIRST SYMBOLS, WHICH MAY BE USED FOR UNIMPORTANT GENERA

a	<i>Alnus</i>	Alder
c	<i>Celtis</i>	Hackberry
d	<i>Diospyros</i>	Persimmon
e	<i>Aesculus</i>	Buckeye
f	<i>Persea</i>	Bay
g	<i>Gleditsia</i>	Locust
h	<i>Mohrodendron</i>	Silverbell
i	<i>Ilex</i>	Holly
j	<i>Gymnocladus</i>	Coffee tree
k	<i>Castanopsis</i>	Chinquapin
l	<i>Planera</i>	Planer tree
m	<i>Morus</i>	Mulberry
n	<i>Nyssa</i>	Gum
o	<i>Neo-washingtonia</i>	Palm
p	<i>Prunus</i>	Plum. Cherry
q	<i>Rhododendron</i>	Rhododendron
r	<i>Robinia</i>	Locust
s	<i>Salix</i>	Willow
t	<i>Platanus</i>	Sycamore
u	<i>Umbellularia</i>	Laurel
v	<i>Magnolia</i>	Magnolia
w	<i>Swietenia</i>	Mahogany
x	<i>Toxylon</i>	Osage Orange
y	<i>Yucca</i>	Yucca
z	<i>Sabal</i>	Palmetto

CONVENTIONAL SIGNS

	Wagon road		Hotel
	Secondary road		Store
	Trail		School
	Railroad		Church
	Telegraph line		Cemetery
	Telephone line		Telegraph office
	Power line		TLR. Telephone office
	Pipe line		Cabin
	Aqueduct		Logging camp
	Fence		Sawmill, portable
	Ditch		Sawmill, stationary
	Flume		Grist mill
	Bridge		Grist and sawmill
	Corral		Apiary
	Supervisor's headquarters		Windmill
	Ranger's h'dq'r's, no house		Well
	Ranger's h'dq'r's, with house		Quarry or gravel pit
	House		Mine location, unpatented
	Railroad station		Mine shaft
	Stage station		Triangulation station
	Power station		Bench mark



LETTERING.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 123456789

(topography)

UPPER CASE USED FOR TITLES MOUNTAIN RANGES, STATE NAMES, TOWNSHIP AND RANGE NUMBERS, GRANTS, AND RESERVATIONS, ALPHANUMERIC SYMBOLS.

Upper and Lower Case for Peaks, Valleys, Islands, Capes, etc., Meridians and Parallels, Legends and Scales.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z 1 2 3 4 5 6 7 8 9

(culture)

UPPER CASE FOR RAILROADS, ROADS, TELEPHONE LINES, AND OTHER MEANS OF COMMUNICATION.

Upper and Lower Case for Other Culture.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 123456789

(settlement)

UPPER CASE FOR CITIES, STATE, AND COUNTY BOUNDARIES.

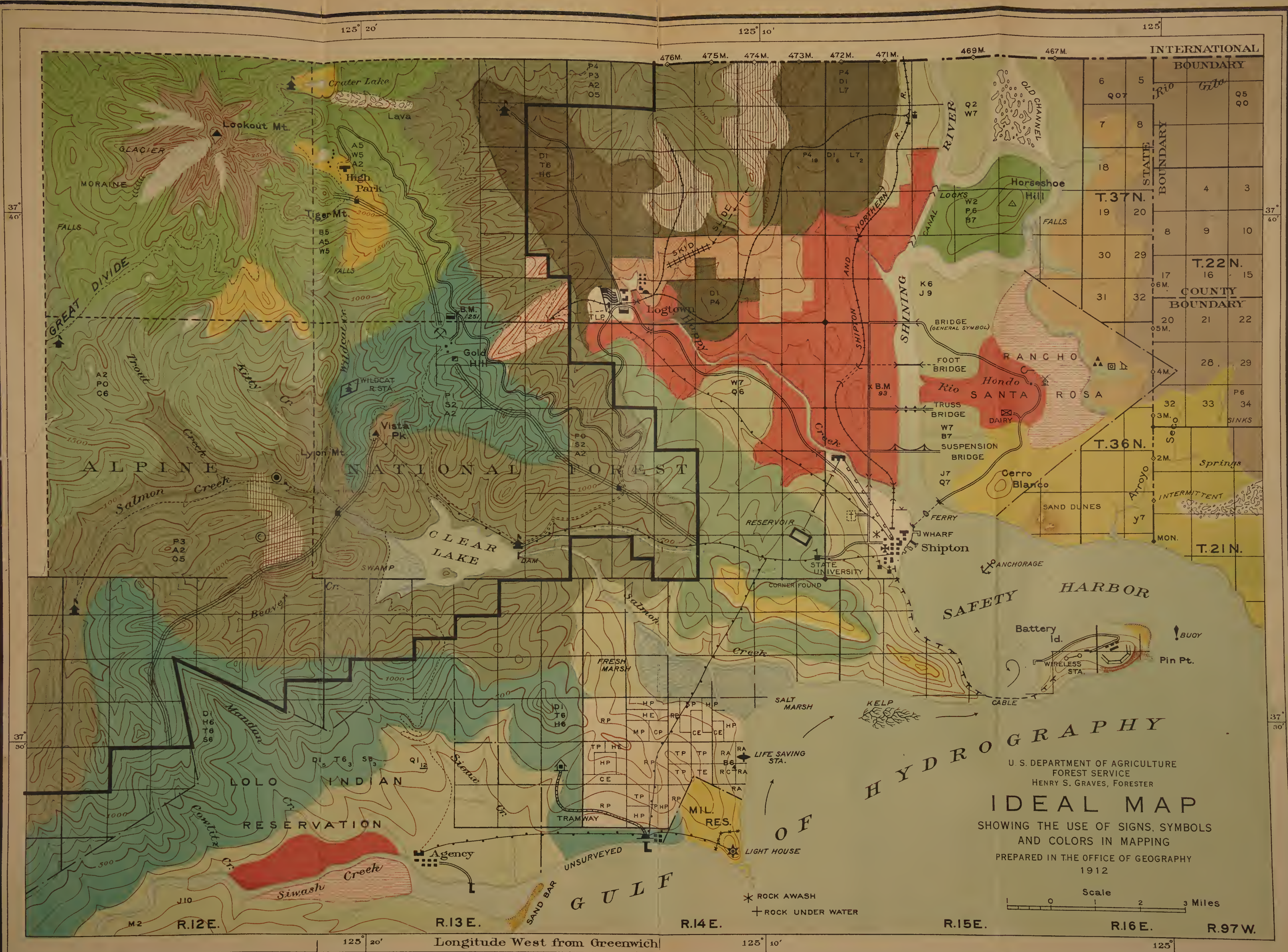
Upper and Lower Case for Towns, Villages, Post Offices.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 123456789

(water)

UPPER CASE FOR OCEANS, LARGE RIVERS, LAKES, ETC.

Upper and Lower Case for Small Rivers, Creeks, Springs, Marshes, Glaciers, Canals, Ditches, etc.



AUTHOR

TITLE

F762ms

Reelms

AUG 3 1967

AUG

